

Commander Henry K. Hoff, USN, July 7, 1861  
TRANSCRIPTION:

CITATION: NARA RG71, Misc. Ltrs. Sent and Recd, Bureau of Yards and Docks  
1861-1863, Report on deVillero Sub, 7/7/1861  
Report on deVillero Sub

Dated: 7/7/1861  
Summary/Transcript

Copy  
Navy Yard Phila  
July 7th 1861

Sir

In obedience to your order of may 3rd 1861 the Diving Machine of Mr DeVillero being reported ready for inspection, we proceeded to Delanco, New Jersey to examine it and have the honor to make the following report.

The Submarine Propeller submitted to our investigation consists of an iron cylinder, cone shaped at the two extreemities about thirty three feed in length and four feet at its greatest diameter. It is propelled by means of a screw in the stern with two {?}Prinions, one on either side, resembling somewhat a whale in external form and apperance. Light is communicated to the interior by means of glass bulls eyes on the back, thirty six in number. An ellipsoidal section eight inches in height, opening at will affords entrance and exit for a crew of from six to twelve men, according to the speed required; A corresponding section at the bottom of the boat admits the egress of the divers, who, breathing by means of tubes attached to the boat are enabled to perform submarine operations, such as raising sunken cargoes, and attaching torpedos to the bottoms of hostile vessels. An artificial atmosphere perfectly respirable by the men is generated bu the inventor by a chemical process so that the submerged boat is executes its maneuvers without any connection with the surface. Its entire apparatus is contained in the interior and invisible from the outside.

In justice to Mr. De Villeroi we should state that the boat in question was constructed for salvage purposes and not for war uses, (for the latter, he propoes if his services are accepted by the Government to construct another on a larger sceale whose greater capacity would afford additional facilities for the maneuvers of the men while it would also be provided with greatly increased power of propulsion) so that in the experiment we have considered the machine employed simple as a model to demonstrate the principles to be established by the inventor.

From the experiments we have witnessed, corrobated by those made previously, we consider that Mr. DeVillero has demonstrated the following principles:

- 1st The ability to remain submerged for a lentgh of time without communication with the surface or external atmosphere and without the least fatigue or exhaustion to the men.
- 2nd That of sinking and raising his boat at pleasure making repeated immersions and emersions.
- 3rd Ability of the men to leave and return to the boat while under water.

4th Ability of a man leaving the boat to live for a length of time, breathing by means of a tube connected with the boat.

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services of this distinguished ? Engineer would be very valuable to the Government and the possession of his invention would be an acquisition of the greatest importance. It is evident that in the event of war, with a foreign power the mere knowledge that we possessed such a mysterious invisible engine of destruction, would have the effect of production great caution on the part of invading fleet in our waters, causing apprehension and alarm in the minds of those on board as to their safety while lying at anchor in a river or a roadstead.

The examination of the Telescope called for in your order, has not been made [it] having been brought to our note by the inventor.

Signed

Henry K. Hoff

Commander

Chas. Steadman

Commander

Robert Danby

Chief Engineer

[to]

Capt. S.F. Dubont

Comdg U.S. Naval Station

Philadelphia.

END OF TRANSCRIPTION